

Before the
FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of)

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Revision of the Commission's
Rules to Ensure Compatibility)

With Enhanced 9-1-1 Emergency
Calling Systems)

CC Docket No. 94-102

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

COMMENTS OF NENA
IN RESPONSE TO REQUESTS FOR WAIVER
OF ENHANCED 9-1-1 PHASE II REQUIREMENTS

I. Introduction

The National Emergency Number Association ("NENA") hereby submits the following comments regarding the previously filed comments regarding waivers of the Phase II Automatic Location Identification ("ALI") requirements.

NENA is the premier 9-1-1 organization in the nation and is solely devoted to 9-1-1. It represents over 6,000 professionals. NENA sets the 9-1-1 standards working with the Public Safety Answering Points ("PSAPs"), equipment vendors, and carriers throughout North America. NENA was a leading participant in every official process related to the development of the Enhanced 9-1-1 Rules¹, including the TIA and PCIA Joint Expert Meetings in 1994, the February 1996 Consensus Agreement between the Wireless Industry and Public Safety, the Wireless E9-1-1 Implementation Ad Hoc, and the TIA TR45.2 and T1P1 standards groups.

NENA is filing its comments in support of the current rule requiring ALI information by October 1, 2001. NENA is dismayed by the current tenor of this debate and finds little substance in the proposition that sufficient evidence has been introduced to support a waiver for the current rule. A critical public safety issue where lives, injuries and public safety resources are at stake, has regrettably somehow been twisted to now focus on technologies and carrier convenience. In

¹ Report and Order and Further Notice of Proposed Rulemaking ("Order"), 11 FCC Rcd 18676 (1996); Order on Reconsideration, 12 FCC Rcd 22665 (1997).

July 1996, the Commission listened to the needs of Public Safety, and acted on them when it issued the Report and Order which set the date by which carriers were to provide Phase I and Phase II Enhanced Wireless service. On January 22, 1997, only six months after the Report and Order, the New Jersey Office of Emergency Telecommunications Services launched a 100-day live wireless enhanced 9-1-1 trial which met Phase II standards. Many other successful demonstrations have taken place since then in Texas and across the nation. The New Jersey system located over 3,500 live 9-1-1 calls over two years ago -- four years before the 2001 deadline set by the Order. This live demonstration was viewed and praised by the then Chairman of the Commission, Reed Hundt. However, as late as last month, attempts are being made to delay implementation of enhanced wireless 9-1-1 in Houston .²

II. Wireless growth and developments since the 94-102 docket opened

Wireless subscribers and cell sites have more than tripled, and wireless emergency calls have more than doubled while wireless revenue continues to grow. Wireless emergency calls now exceed 100,000 per day, representing between 25 and 40 percent of all emergency calls as shown below by CTIA's statistics:

<u>Month/Year</u>	<u>Subscribers</u>	<u>Cell Sites</u>	<u>Wireless Revenues</u>	<u>Emergency Calls</u>
Dec 1994	24.1 million	17,900	\$14.2 billion	49,000 per day
Dec 1995	33.8	22,700	\$19.0	55,000
Dec 1996	44.0	30,000	\$22.6	67,000
Dec 1997	55.3	51,600	\$27.4	80,000
Dec 1998	69.2	65,900	\$33.1	98,000
May 1999	74.0 (est.)	70,000 (est.)		110,000 (est.)

For many years, wireless surveys have recognized that personal safety is one of the major reasons for which consumers purchase wireless phones. Because of the very success of the

² On June 22, 1998, Houston Cellular and the Greater Harris County 9-1-1 Emergency Network (Network) signed a contract to test, for a period of six months, actual 9-1-1 calls in a portion of the Network's 9-1-1 service area. The Network upgraded 9-1-1 premise equipment, funded the installation of equipment on 70 Houston Cellular towers, made thousands of test calls utilizing a *211 number, and was ready to have Houston Cellular "turn on" the system for the six-month test of actual 9-1-1 calls, when Houston Cellular abruptly attempted to cancel the contract. The Network was forced to file suit to make Houston Cellular fulfill its contract to allow testing of actual 9-1-1 calls utilizing location determination technology. The six-month test is on hold pending the outcome of the lawsuit. The delay means that life-saving technology which is in place and which could be locating citizens in need of emergency help, cannot be utilized.

wireless industry, with exponential sales growth due, in part, to the perceived personal safety benefits of wireless devices, the Commission stated the following in issuing the NPRM³ in 1994:

“We have become increasingly concerned about the inability of mobile radio systems to interface with the enhanced 911 systems that have been deployed in wireline networks.”⁴

“We believe that Commission action is necessary to ensure that, over time, mobile radio service users on the public switched telephone network have the same level of access to 911 emergency services as wireline callers. Wireless customers clearly expect access to 911 services, and may be unaware that their mobile radio services do not provide the kind of location information that emergency services personnel receive from stations on the wireline network.”⁵

“...industry and standards-setting bodies should direct particular attention to offering an emergency 911 capability for services that would work with enhanced 911 systems and, to the extent feasible, permit locating a caller when the caller does not know his location”.⁶

NENA believes that the growth in wireless makes the need for automatic location of wireless 9-1-1 calls even more critical now. At the last two CTIA Wireless Conventions, the FCC Chairman noted,

“E-911 is another responsibility that comes with membership in the [telecommunications] club. If you market yourself as a safety service, consumers will take you at your word.

The American people have come to expect that their telecommunications networks -- all of them -- will help get them emergency assistance when they need it. They are outraged every time they learn that someone was injured or died because their wireless phone didn't work with the 911 system. It may be hard to do, but it is about delivering customers the service they expect. It's not an unfunded mandate -- it's serving the customer. Providing E911 services will protect your customers and move us closer to the day when consumers view wireless as a complete substitute for wireline.”⁷

The deadline for launching “phase II E-911 location” is October 2001. I don't think we should wait until the next millennium to bring a service to Americans that they need today. My challenge to you is not just meet, but to beat, that deadline.

We will do our part. Your part is simple: to step up to the plate and provide this lifesaving service to the American people.”⁸

³ Notice of Proposed Rulemaking (“NPRM”)

⁴ NPRM at 34

⁵ NPRM at 37

⁶ NPRM at 34, referencing its Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, September 23, 1993

⁷ Speech of William Kennard at 1998 CTIA Wireless Convention

⁸ Speech of William Kennard at 1999 CTIA Wireless Convention

For five years, the Commission has recognized the needs of public safety and publicly encouraged rapid implementation of the Rules. However, NENA is concerned that the real focus has now shifted to a delay in implementation – and a technology debate that has no place here – and away from the needs of Public Safety on which the 1996 Order was based.

III. The Current Order

The current Order was directly based on the requirements of public safety as expressed by the professional managers of 9-1-1 systems in a series of technical and policy meetings beginning in 1994, and culminating on a landmark Consensus Agreement between the wireless industry and public safety. In that Agreement, public safety agreed to concessions⁹ in the short term in order to receive location information in the long term (then defined as five years from the time of the Agreement). Throughout this lengthy process, NENA consistently has taken the position of supporting any location technology solution that will work throughout the nation and delivers the features needed to ensure compatibility with the nation's Enhanced 9-1-1 Emergency Calling System. When these public safety requirements were established, the carriers were given more than five years to comply.

There are clearly problems with the implementation of the Order. Progress has been painfully slow. It may be that changes need to be made in the Order, but NENA submits that technology is not the central problem, nor should it be the central focus of the current debate.

The current rule, as repeatedly stated by the FCC, is a technologically neutral performance standard requiring universal handset coverage by October 2001, to an accuracy within 410 feet on 67% of all calls¹⁰. The December, 1998 Notice implicitly changes the performance standard to "less than 410 feet, and only cover new handsets." In the February, 1999 filings pursuant to the Notice, no carrier applied for a handset solution; all applied for either an undefined "option", or simply non-compliance. APCO's proposal of May 25th suggests rapid movement toward ALI-capable new handsets by December 2001, but would require the next four years to make the embedded base of handsets ALI-capable. Just as the initial Order was based on Public Safety requirements, any fundamental changes to the Order requires a public safety analysis and justification. If the Commission desires to change the Enhanced 9-1-1 Rule, it should first and fundamentally ask what impact any changes will have on the overall social benefits and costs that motivated the initial Order (and which have been amplified by the growth in wireless emergency calls since then). Instead, it would appear the Commission is being

⁹ Including reducing the number of phases from three to two, and eliminating the three-dimensional requirement.

¹⁰ The exact proposal from the Wireless E9-1-1 Implementation Ad Hoc in a letter to the FCC dated November 25, 1998, is "Phase II location will be attempted on all 9-1-1 calls routed towards a Public Safety Answering Point (PSAP) and will be accurate to within 125 meters in 67% of these cases."

pushed into a private sector battle over costs and profits, characterized as a technology debate.

IV. The Parties to this Debate

A central concern of NENA is which parties are driving the current efforts to change the Rule to delay implementation. The regulations apply to wireless carriers and public safety authorities. Handset vendors are merely the intermediaries in delivering this public safety benefit; yet their concerns appear to be dominating this debate.

NENA respectfully submits that a vendor-based analysis of the Rule is inappropriate.

In issuing the NPRM, the Commission stated:

“Congress created the Federal Communications Commission “for the purpose [among others] of promoting safety of life and property through the use of wire and radio communication....” This Commission has jurisdiction to license the electromagnetic spectrum, and also to regulate “instrumentalities, facilities [and] apparatus” through which wire and radio services are provided. It is difficult to identify a nationwide service more immediately associated with promoting safety of life and property than 911. We believe that broad availability of 911 and enhanced 911 services will best promote “safety of life and property through the use of wire and radio communication.”¹¹

Nowhere did the Commission state that it should be concerned with vendors and other intermediaries, and the technology debates between them. The Commission rightly identified its obligation solely to public safety. The parties that the Commission should reach out to and give the most attention to are the deliverers of emergency response and care -- not the intermediaries. Many of our members are the first line of response. They are the public safety experts, and their leaders and organizations can tell the Commission what minutes or hours of delay in response actually means in the realm of delivering emergency care, and what the absence of automatic wireless 9-1-1 location means to effective emergency resource deployment. These emergency provider groups can provide first-hand information to the Commission on these issues; intermediaries are focused instead on their more narrow business concerns.

We encourage the Commission to affirmatively reach out to seek the views of such expert safety organizations. Most do not follow the processes of the Commission. Those that do believe there will be automatic wireless location no later than 2001, relying on what they have heard about the 1996 Order. They are not yet aware that some seek to significantly delay or repeal the Order.

¹¹ NPRM at 7

V. What Are The Benefits of Waivers to Public Safety?

On the benefit side of a Rule change, only increased accuracy was posited by the Notice, and the response was at best a highly qualified commitment to meet a standard providing 100 feet more accuracy¹². While NENA certainly favors more accuracy, there is not one assertion in the Notice or the waiver requests, and not one piece of evidence, that increased accuracy, much less a 25 percent improvement, will save any more lives, reduce any injuries, or (most importantly) will not already occur naturally due to the forces of competition, as so eloquently cited by the Chairman in his recent speech to the CTIA Convention on February 9th of this year. Similarly, there is no evidence of financial costs savings due to delay, and certainly nothing compared to the costs of lives lost due to delays. The benefits from technological neutrality are already being met by the current Rule, and therefore no change is needed – only enforcement.

Even if evidence were presented showing safety benefits of greater accuracy, NENA believes the emergency response community would tell the Commission that the safety benefits of implementing the current rule soon, instead of much later, would overwhelm those later improvements. Early implementation of the Order is what is needed to save lives and reduce injuries, rather than a delay to benefit a specific technology.

The primary benefits cited appear to be convenience to carriers from not having to comply with the current Order, and business advantage for companies that have handset technologies they would like to commercialize even though they lack features today which are essential to Enhanced 9-1-1¹³. NENA recognizes the natural behavior inherent to any private sector enterprise. If given the choice of rapid implementation (hopefully before October 1, 2001), or spreading costs over many years into the future, most carriers naturally would probably pick the latter option. Any new rule with different implementation schedules for different technologies is per se not “technologically neutral”, nor beneficial to public safety, unless it includes all handsets at the starting gate.

VI. What Are the Costs of Waivers to Public Safety?

On the cost side of the equation, there has been a paucity of information provided in the filings. Other than the Public Safety filing, there was no discussion of the cost of lives lost¹⁴ and

¹² NENA was invited to witness trials of one of the handset technologies central to the current technology debate. While impressed with the performance of the technology relative to more traditional GPS technologies, NENA believes that the highly qualified commitments recognize the significant work remaining to move from partial prototypes to a commercial product.

¹³ For example, the ability to deliver location information in time to meeting the selective routing requirements that are the heart of enhanced 9-1-1 systems.

¹⁴ While there are many tragic stories to tell, there is one recent story from the April 10, 1999 edition of *The Journal Gazette*, Fort Wayne, Indiana, titled “911 caller dies before police can find car in ditch”. The story underscores the frustration of public safety and the cost in life:

increased morbidity due to the absence of emergency location for millions of subscribers during the significant period of time contemplated by either the Notice or the waiver requests. APCO's recent filing does not address this fundamental issue.

Similarly, there has been no discussion of the costs to public safety agencies of prolonged delay in automatic wireless 9-1-1 location: in longer times for handling calls, in multiple unit dispatch, and in expensive searches. The Commission must remind itself of the primary purpose of the Rules and the sense of urgency in which it was developed and adopted. The costs described herein are enormous and growing, and far outweigh any concerns raised by vendors and intermediaries regarding their specific technologies.

The size and scope of the embedded base of handsets – whose owners also expect and deserve Enhanced 9-1-1 capability – is glossed over in most filings, and little attention has been paid to the un-subscribed handset issue created by the Commission's related 1997 Order. Worse, the Commission, which ordered 9-1-1 service to all wireless callers without regard to subscriber status, now seems willing to abandon the almost 75 million handsets in use today (estimated to grow to over 100 million handsets by 2001).

Rather than seeking more waiver filings, NENA respectfully suggests that the Commission instead seek expert EMS, law enforcement, public safety and consumer opinion on the costs and benefits of the current Rule, and of various options which would delay wireless Enhanced 9-1-1. There is no shortage of credible, expert, and concerned organizations, and, NENA suggests that during the planned technology forum, the Commission solicit input on the costs of waivers and delay to public safety. NENA believes that the public safety costs and benefits are fundamentally better addressed if wireless location is deployed no later than 2001, as opposed to deployment many years later.

VII. Conclusions

NENA respectfully encourages the Commission to enforce the current Rules. The current Rules are sufficient and were long ago broadly agreed to by wireless and Public Safety. NENA remains committed to technology neutrality, so long as any proposed technology can meet the needs identified as far back as 1994¹⁵. It is time that the Commission rapidly complete the

(Note 14 continued)

"Pinned in his overturned car, knowing only that he was in a ditch off an Allen County road, Jon Charleston used his cell phone to call...for help. But by the time police found Charleston,... it was almost two hours later. He had no pulse, and efforts to revive him were fruitless....Officers from Allen County, Fort Wayne, New Haven and Churubusco joined with firefighters from St. Joseph, Washington and Aboite townships in the search."

¹⁵ Any interested party can reference the 1994 Joint Expert Meetings sponsored by Public Safety, TIA, and PCIA, and the 1994 NPRM for a discussion on the needs of enhanced 9-1-1 systems regarding wireless calls.

decision making necessary to eliminate the barriers to early implementation of the Rule. There are applications and petitions before the Commission awaiting action that will assist the Public Safety Community in the deployment of wireless 9-1-1.¹⁶

All decisions should be based upon the needs of Public Safety and not any intermediary. NENA requests that the Commission reach out to the broader Public Safety community – including call takers, emergency physicians and nurses, trauma centers, firefighters, and similar groups – and better understand their needs and the problems and costs associated with lack of location information and other enhanced 9-1-1 features.

In America today, any person can potentially be the next person involved in or witnessing a tragedy, and if the call to 9-1-1 comes from a wireless phone, there is not now a PSAP in the country that will know the location of that call. This situation is an unacceptable condition that should not be subject to the delay or lack of focus by any party to the current debate.

NENA recognizes that there are many confusing and conflicting viewpoints on these matters. It is clear that a focused coalition appointed by the Commission could provide the opportunity and forum for all parties to be heard and to be part of the solution of this issue.

NENA is prepared, in cooperation with industry, to immediately hold a series of round table discussions with all interested parties in this proceeding to bring closure to all of the open issues, in order to benefit public safety.

Respectfully submitted,

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¹⁶ "Joint Petition to Ensure Interoperability of E9-1-1 Emergency Calling Systems," filed nearly a year ago by the Harris, Tarrant, Bexar and Denton County (Texas) 9-1-1 authorities, joined by the Texas Advisory Commission on State Emergency Communications and the National Association of State Nine One One Administrators. The petition is pending at the FCC.